FILE COVERS 1907 - 15 Dec 2003 VOL 139 ISS 25
FILE LAST UPDATED: 14 Dec 2003 (20031214/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

=> d que nos l29
'L29' IS NOT VALID HERE

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L6	228129	SEA	FILE=REGISTRY	ABB=ON PLU=ON	N2CNC/ES
L8	116182	SEA	FILE=REGISTRY	ABB=ON PLU=ON	N4C/ES
L9		STR			
L10	342096	SEA	FILE=REGISTRY	ABB=ON PLU=ON	L6 OR L8
L12	18380	SEA	FILE=REGISTRY	SUB=L10 SSS FUL	L9
L13	1	SEA	FILE=REGISTRY	ABB=ON PLU=ON	GELATIN/CN
L14	23	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L13
L15	8504	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L12
L16	33262	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L14 OR GELATIN#/OBI
L17	26	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L16 (L) L15
L18	30529	SEA	FILE=CAPLUS	ABB=ON PLU=ON	HETEROCYC? (3A) (N OR NITROG?)
L19	711	SEA	FILE=CAPLUS	ABB=ON PLU=ON	AROMATIC (S)NITROG? (S) RING?
L20	31098	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L19 OR L18
L21	80	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L20 AND GELATIN/OBI
L22	265315	SEA	FILE=CAPLUS	ABB=ON PLU=ON	SILVER/OBI OR AG/OBI
L23	31024	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L22 (L) HALIDE#/OBI
L24	42	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L23 AND L21
L25	83251	SEA	FILE=CAPLUS	ABB=ON PLU=ON	COVALENT?/OBI OR COVALENT?/AB
L26	1	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L24 AND L25
L27	108718	SEA	FILE=CAPLUS	ABB=ON PLU=ON	MERCAPTO?/OBI OR MERCAPTO?/AB
L28	6	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L27 AND L24
L29	28	SEA	FILE=CAPLUS	ABB=ON PLU=ON	L17 OR L26 OR L28

=> d .ca hitstr l29 1-28

L29 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:470985 CAPLUS
DOCUMENT NUMBER: 139:28594
TITLE: Manufacture of photographic emulsion containing **silver halide** tabular grain using modified **gelatin**
INVENTOR(S): Takahashi, Kazutaka; Yanagi, Terukazu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003172985	A2	20030620	JP 2001-372981	20011206

PRIORITY APPLN. INFO.: JP 2001-372981 20011206
OTHER SOURCE(S): MARPAT 139:28594

AB The emulsion is manufactured by supplying Ag halide particles formed in the presence of a modified gelatin Gel-L1(L2ZSH)n (Gel = residue which reactive group L1 removed from gelatin; L1 = ≥1 reactive group of CO2, NH, N, O, S, NHC(:NH2+)NH, and NHC(:NH)NH in gelatin; L2 = bivalent or trivalent liking group; Z = **N**-containing aromatic **heterocycle**; **n** = 1, 2) into a reaction vessel for their nucleation and growth. The tabular Ag halide particles are characterized by average circular diameter ≥0.6 μm, thickness <0.2 μm, and (111) parallel principal planes in their total projection area ≥50%. The emulsion is monodispersed and shows high sensitivity.

IC ICM G03C001-035
ICS G03C001-015; G03C001-047

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog emulsion monodisperse **silver halide** tabular grain; **mercapto** azole modified **gelatin** photog emulsion; pyridinium compd photog emulsion manuf

IT Photographic emulsions
(manufacture of monodispersed **silver halide** tabular grain using modified **gelatin**)

IT **Gelatins**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(modified; manufacture of monodispersed **silver halide** tabular grain using modified **gelatin**)

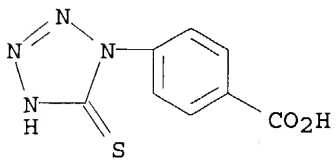
IT 466658-29-7
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(crystal phase-controlling agent; manufacture of monodispersed **silver halide** tabular grain using modified **gelatin**)

IT **23249-95-8DP**, reaction products with **gelatin**
RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)
(manufacture of monodispersed **silver halide** tabular grain using modified **gelatin**)

IT **23249-95-8DP**, reaction products with **gelatin**
RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)
(manufacture of monodispersed **silver halide** tabular grain using modified **gelatin**)

RN 23249-95-8 CAPLUS

CN Benzoic acid, 4-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)- (9CI) (CA INDEX NAME)



L29 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:898256 CAPLUS
DOCUMENT NUMBER: 138:178096
TITLE: Formation and optical properties of silver nanoparticles in gelatin layers containing ultradispersed silver halides
AUTHOR(S): Sergeeva, O. V.; Stashonok, V. D.; Mamedov, A. A.; Kulakovich, O. S.; Rakhmanov, S. K.
CORPORATE SOURCE: NII Fiz.-Khim. Problem, Belgosuniv., Belarus
SOURCE: Vestsi Natsyyanal'nai Akademii Navuk Belarusi, Seryya Khimichnykh Navuk (2002), (3), 39-45
CODEN: VNBNFX; ISSN: 1561-8331
PUBLISHER: Belaruskaya Navuka
DOCUMENT TYPE: Journal
LANGUAGE: Russian

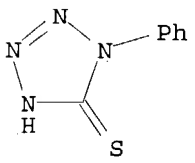
AB Some peculiarities of formation and optical properties of nanosized silver particles in model layers (gelatin matrix with ultradispersed silver or AgHal distributed in it) were investigated. It was shown that phys.-chemical conditions affect the size and shape of silver particles formed in gelatin layers containing silver halides during reduction Some properties and conditions of silver nanofilaments formation in the layers were determined

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **86-93-1**, 1-Phenyl-5-mercaptotetrazole
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(formation and optical properties of silver nanoparticles in **gelatin** layers containing ultradispersed silver halides)

IT **86-93-1**, 1-Phenyl-5-mercaptotetrazole
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(formation and optical properties of silver nanoparticles in **gelatin** layers containing ultradispersed silver halides)

RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:886194 CAPLUS
DOCUMENT NUMBER: 137:391013
TITLE: Modified water-soluble polymers and storage-stable photographic materials having them with suppressed aggregation of silver halides
INVENTOR(S): Yanagi, Terukazu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002332356	A2	20021122	JP 2001-140391	20010510

PRIORITY APPLN. INFO.: JP 2001-140391 20010510

AB The invention relates to water-soluble polymers (gelatin, for example) having silver halide-adsorbing groups (Q) and reducing groups (R) with oxidation potential 0-0.6V. The groups Q may be ZSH (Z = N-containing aromatic hetero ring) and R may be derived from R61R62NOH or R63R64N2R65R66 (R61, R62 = H, substituent, may form a ring; R63-66 = H, alkyl, aryl, hetero ring, may be combined to form a ring).

IC ICM C08H001-00
ICS C07K014-78; G03C001-04; G03C001-047

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

IT 6066-82-6DP, N-Hydroxysuccinimide, reaction products with dimethylethylaminopropylcarbodiimide, modifying compds., and gelatin 15058-51-2DP, reaction products with gelatin **23249-95-8DP**, reaction products with hydroxysuccinimide, dimethylethylaminopropylcarbodiimide, and **gelatin** 25952-53-8DP, WSC, reaction products with hydroxysuccinimide, modifying compds., and gelatin 202461-87-8DP, reaction products with hydroxysuccinimide, dimethylethylaminopropylcarbodiimide, and gelatin **475641-43-1DP**, reaction products with hydroxysuccinimide, dimethylethylaminopropylcarbodiimide, and **gelatin**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)

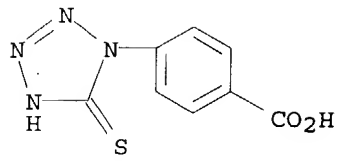
IT 140-88-5, Ethyl acrylate 1885-14-9, Phenyl chloroformate 4229-44-1, Methylhydroxylamine hydrochloride 63234-71-9, 1-Aminopyrrolidine hydrochloride **71205-32-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)

IT 15058-51-2P **475641-43-1P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(modifying compds.; modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)

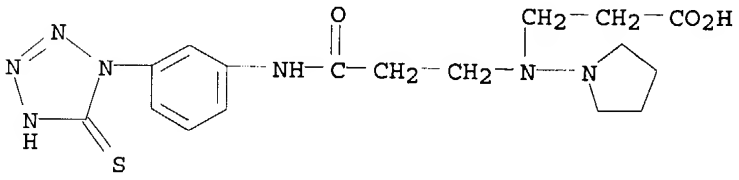
IT **23249-95-8DP**, reaction products with hydroxysuccinimide, dimethylethylaminopropylcarbodiimide, and **gelatin** **475641-43-1DP**, reaction products with hydroxysuccinimide, dimethylethylaminopropylcarbodiimide, and **gelatin**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)

RN 23249-95-8 CAPLUS

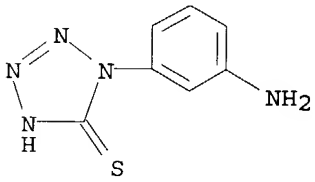
CN Benzoic acid, 4-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)- (9CI) (CA INDEX NAME)



RN 475641-43-1 CAPLUS
CN β-Alanine, N-[3-[[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]amino]-3-oxopropyl]-N-1-pyrrolidinyl- (9CI) (CA INDEX NAME)

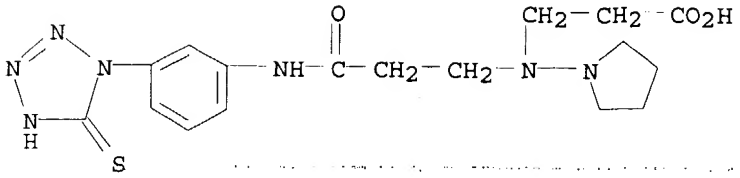


IT **71205-32-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)
RN 71205-32-8 CAPLUS
CN 5H-Tetrazole-5-thione, 1-(3-aminophenyl)-1,2-dihydro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT **475641-43-1P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(modifying compds.; modified **gelatin** for storage-stable photog. color films with good dispersibility of silver halides)
RN 475641-43-1 CAPLUS
CN β-Alanine, N-[3-[[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]amino]-3-oxopropyl]-N-1-pyrrolidinyl- (9CI) (CA INDEX NAME)



L29 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:814722 CAPLUS
DOCUMENT NUMBER: 137:331019
TITLE: **Silver halide** photographic emulsion comprising modified **gelatin** and photographic light-sensitive material
INVENTOR(S): Yanagi, Terukazu; Sakurazawa, Mamoru; Takeda, Naohiro; Maruyama, Yoichi; Takada, Katsuyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 73 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002155398	A1	20021024	US 2001-26843	20011227
JP 2002357878	A2	20021213	JP 2001-310289	20011005

PRIORITY APPLN. INFO.: JP 2000-397237 A 20001227
JP 2001-78191 A 20010319
JP 2001-102468 A 20010330
JP 2001-310289 A 20011005
OTHER SOURCE(S): MARPAT 137:331019

AB Disclosed is a modified gelatin obtained by reacting a gelatin and a compound which contains a **nitrogenous aromatic ring** having a **mercapto** group to form **covalent** bond with a reactive group in the gelatin, an introduction amount of the compound in the gelatin being 1.0+10-6mol 2.0+10-3 mol per 100 g of the gelatin. According to the present invention, it is possible to provide an excellent emulsion silver halide and light sensitive material of a high sensitivity and a small variation in the photog. property due to lapse of time. In particular, the modified gelatin of the present invention has an effect of inhibiting aggregation of silver halide grains after lapse of time of dissoln. of the emulsion, and permits preparation of a silver halide emulsion which has been improved in the problem of deterioration in the photog. property in coating and is excellent in suitability for preparation

IC ICM G03C001-035
ICS G03C001-047
NCL 430567000
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST modified **gelatin silver halide** photog emulsion film
IT Photographic emulsions
Photographic films
(color; **silver halide** photog. emulsion comprising modified **gelatin** and photog. light-sensitive material)

IT **Gelatins**, preparation
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reaction products; **silver halide** photog. emulsion comprising modified **gelatin** and photog. light-sensitive material)

IT 25952-53-8, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RGT (Reagent); PROC (Process); RACT (Reactant or reagent)
(condensing agent; in preparation of modified **gelatin**)

IT 6066-82-6, N-Hydroxysuccinimide
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RGT (Reagent); PROC (Process); RACT (Reactant or reagent)
(in preparation of modified **gelatin**)

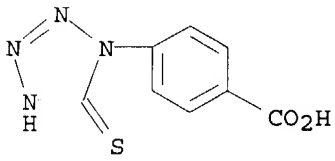
IT 85-44-9DP, Phthalic anhydride, reaction products with **gelatin**
552-30-7DP, Trimellitic anhydride, reaction products with **gelatin**
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**silver halide** photog. emulsion comprising modified **gelatin** and photog. light-sensitive material)

IT **23249-95-8DP**, reaction products with **gelatin**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**silver halide** photog. emulsion comprising modified **gelatin** and photog. light-sensitive material)

IT **23249-95-8DP**, reaction products with **gelatin**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**silver halide** photog. emulsion comprising modified **gelatin** and photog. light-sensitive material)

RN 23249-95-8 CAPLUS

CN Benzoic acid, 4-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)- (9CI) (CA INDEX NAME)

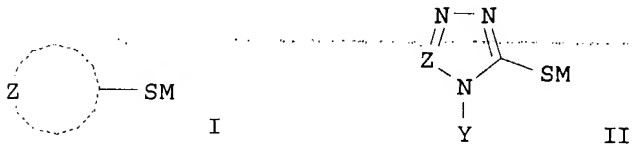


L29 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:654938 CAPLUS
DOCUMENT NUMBER: 135:218658
TITLE: **Silver halide** photographic material containing heterocyclic **mercapto** compound
INVENTOR(S): Oikawa, Noriki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2001242586	A2	20010907	JP 2000-60454	20000301
PRIORITY APPLN. INFO.:			JP 2000-60454	20000301
OTHER SOURCE(S):	MARPAT 135:218658			

GI



AB The material free from a hydrazine derivative comprises a support having thereon ≥1 photosensitive Ag halide emulsion layer and ≥2 light insensitive hydrophilic colloid layers, where (1) the emulsion layer shows Ag to gelatin ratio ≥1, (2) the emulsion layer and/or the colloid layer contains I (Z = **N**-containing **heterocycle**; M = H, metal, ammonium) or II (Z = N, CX; X = alkyl, aryl; M = H, metal, ammonium; Y = alkyl or aryl with a hydrophilic group), and (3) a layer not adjacent to the emulsion layer contains a development accelerator. It is processed at development time ≤20 s, developer replenishment ≤200 mL/m2, and fixer replenishment ≤300 mL/m2. It shows improved storage stability, high sensitivity, and rapid and stable processing capability at low developer replenishment.

IC ICM G03C001-34
ICS G03C001-047; G03C001-295; G03C001-74; G03C005-29; G03C005-31; G03C005-395

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog emulsion silver **gelatin** ratio; heterocyclic **mercapto** compd photog emulsion; development accelerator photog film; low replenishment processing photog film

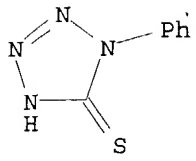
IT Photographic emulsions
(photog. emulsion with controlled silver/**gelatin** ratio and containing heterocyclic **mercapto** compound)

IT **86-93-1 15909-66-7 86893-76-7 99131-26-7**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. emulsion with controlled silver/**gelatin** ratio and containing heterocyclic **mercapto** compound)

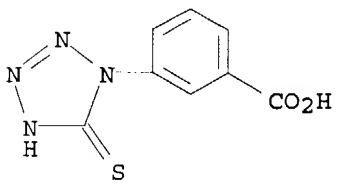
IT **86-93-1 15909-66-7 86893-76-7 99131-26-7**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. emulsion with controlled silver/**gelatin** ratio and containing heterocyclic **mercapto** compound)

RN 86-93-1 CAPLUS

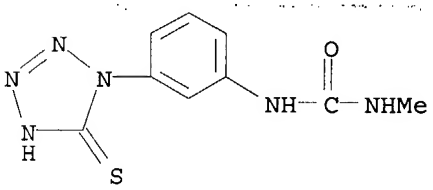
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



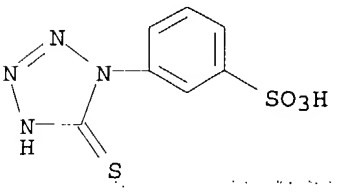
RN 15909-66-7 CAPLUS
CN Benzoic acid, 3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)- (9CI) (CA INDEX NAME)



RN 86893-76-7 CAPLUS
CN Urea, N-[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]-N'-methyl- (9CI) (CA INDEX NAME)



RN 99131-26-7 CAPLUS
CN Benzenesulfonic acid, 3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)-, monosodium salt (9CI) (CA INDEX NAME)



● Na

L29 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:11039 CAPLUS
DOCUMENT NUMBER: 134:216609
TITLE: In situ generated photolytic silver in a gelatin

matrix: an approach for high-throughput SERS spectroscopy applying microtiter plates
AUTHOR(S): Saegmueller, Bernd; Brehm, Georg; Schneider, Siegfried
CORPORATE SOURCE: Institut fur Physikalische und Theoretische Chemie, Friedrich-Alexander-Universitat Erlangen-Nurnberg, Erlangen, D-91058, Germany
SOURCE: Applied Spectroscopy (2000), 54(12), 1849-1856
CODEN: APSPA4; ISSN: 0003-7028
PUBLISHER: Society for Applied Spectroscopy
DOCUMENT TYPE: Journal
LANGUAGE: English

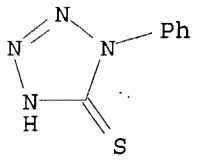
AB To develop a high-throughput anal. method based upon surface-enhanced Raman scattering (SERS) spectroscopy, the authors have successfully tested the possibility of generating SERS-active silver surfaces from home-made AgX dispersions deposited in the wells of com. available microtiter plates. In an effort to reduce the number of preparation steps, the SERS-active silver metal surface is generated from the silver halides in situ after sample application by the tightly focused Raman probe laser. The intensity of the SERS signal increases initially with the conditions for a high-enhancement factor becoming optimal. Later on, it decreases as the solvent is evaporated completely. The signal can, however, be restored to a great extent by adding new refreshing solvent, preferably methanol. Pilot expts. using aromatic thiols and amines as test analytes proved that sample vols. ≥1 mL with analyte concns. down to 10-6 M are sufficient for recording of SERS spectra suitable to identify the analyte. A feasibility study was performed aimed at the identification of several analytes contained in the various fractions of the output of an anal. HPLC instrument.

CC 80-5 (Organic Analytical Chemistry)
Section cross-reference(s): 73

IT 62-53-3, Aniline, analysis **86-93-1**, 1-Phenyl-5-mercapto-tetrazole 91-60-1, 2-Thionaphthol 106-45-6, 4-Methylthiophenol 606-41-7 613-13-8, 2-Aminoanthracene 13362-78-2
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(analyte; SERS spectroscopy using in situ generated photolytic silver in a **gelatin** matrix)

IT **86-93-1**, 1-Phenyl-5-mercapto-tetrazole
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(analyte; SERS spectroscopy using in situ generated photolytic silver in a **gelatin** matrix)

RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:367119 CAPLUS
DOCUMENT NUMBER: 133:10964
TITLE: An imaging element for making an improved printing

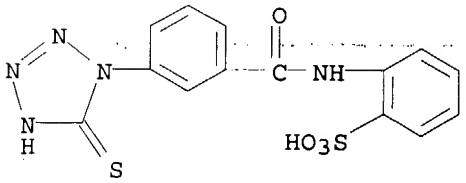
plate according to the silver salt diffusion transfer process
INVENTOR(S): Jonckheere, Marcus
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1004935	A1	20000531	EP 1998-203955	19981123
EP 1004935	B1	20020612		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6136496	A	20001024	US 1999-430142	19991029
JP 2000162765	A2	20000616	JP 1999-325684	19991116

PRIORITY APPLN. INFO.: US 1998-119074P P 19980208
EP 1998-203955 A 19981123

AB An imaging element is provided comprising in the order given on a grained and anodized side of an Al support (i) an image receiving layer containing phys. development nuclei, (ii) a photosensitive layer containing a Ag halide emulsion in H2O permeable relation with the image receiving layer and (iii) optionally an anti-stress layer in H2O permeable relation with the image receiving layer, characterized in that underlying the photosensitive layer there is a layer comprising at least 10 mg/m2 of a copolymer containing at least 1 mol% of tetraallyloxyethane.

IC ICM G03F007-07
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 2503-56-2, 4-Hydroxy-6-methyl-1,3,3a,7-tetraazaindene 50795-56-7, Maleic acid-methyl methacrylate-styrene copolymer 202934-74-5, Silver chloride iodide **271244-58-7**
RL: NUU (Other use, unclassified); USES (Uses)
(Photosensitive neg.-working cadmium-free orthochromatically sensitized **gelatin** emulsion layer containing)
IT **271244-58-7**
RL: NUU (Other use, unclassified); USES (Uses)
(Photosensitive neg.-working cadmium-free orthochromatically sensitized **gelatin** emulsion layer containing)
RN 271244-58-7 CAPLUS
CN Benzenesulfonic acid, 2-[[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)benzoyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:67644 CAPLUS
DOCUMENT NUMBER: 132:129929
TITLE: Silver halide photographic material for printing platemaking and manufacture thereof
INVENTOR(S): Hirabayashi, Kazuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

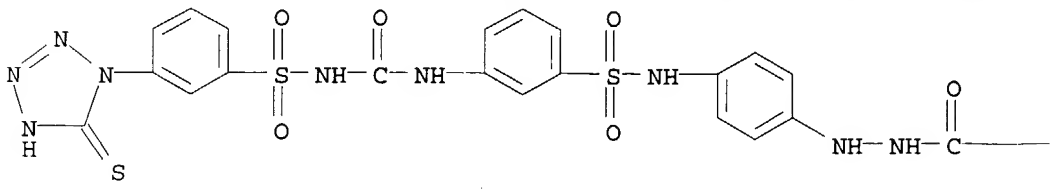
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000029158	A2	20000128	JP 1998-198655	19980714

PRIORITY APPLN. INFO.: JP 1998-198655 19980714

AB In the title photog. material possessing ≥1 Ag halide emulsion layer on a support, all the layers containing gelatin and a polystyrene derivative having sulfonic acid groups or its salt in the photog. constitutive layers on the emulsion layer side satisfy the following conditions: (i) the ratio of the amount of the gelatin to that of the polystyrene derivative is 3.0-15.0 and (ii) the gelatin concentration of the coating solns. for the layers is 2.5-10.0 weight% and the total amount of the gelatin coated on the emulsion layer side is 1.4-2.4 g/m2. A method of manufacturing the photog. material is also claimed. The coating solns. show improved coatability and the photog. material exhibits high applicability to rapid processing.

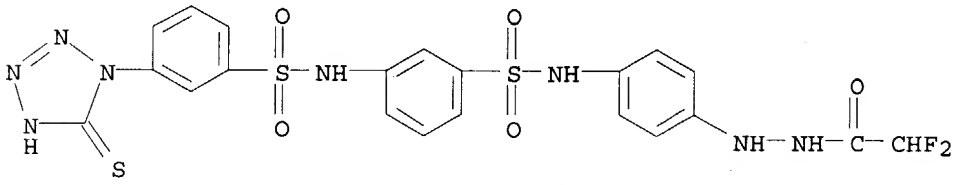
IC ICM G03C001-047
ICS G03C001-053; G03C001-06; G03C001-74
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 183252-42-8 **184098-67-7** 210694-55-6 **212135-15-4**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. film with controlled content of **gelatin** and polystyrene with sulfonic acid group)
IT **184098-67-7 212135-15-4**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. film with controlled content of **gelatin** and polystyrene with sulfonic acid group)
RN 184098-67-7 CAPLUS
CN Acetic acid, difluoro-, 2-[4-[[[3-[[[[[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]sulfonyl]amino]carbonyl]amino]phenyl]sulfonyl]amino]phenyl]hydrazide (9CI) (CA INDEX NAME)

PAGE 1-A



— CHF_2

RN 212135-15-4 CAPLUS
CN Acetic acid, difluoro-, 2-[4-[[[3-[[[3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]sulfonyl]amino]phenyl]sulfonyl]amino]phenyl]hydrazide (9CI) (CA INDEX NAME)



L29 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:735408 CAPLUS
DOCUMENT NUMBER: 130:45210
TITLE: **Silver halide** photographic material using **gelatin**-compatible polymer as high contrast-promoting agent
INVENTOR(S): Furukawa, Akira; Mitsui, Shinobu
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10301220	A2	19981113	JP 1997-104844	19970422

PRIORITY APPLN. INFO.: JP 1997-104844 19970422

AB The title material contains a polymer having a functional group selected from SX (X = **N**-containing **heterocyclic** group) and SC(:S)NR1R2 (R1, R2 = alkyl which may form a ring) which links to its termini in ≥1 of the constitutive layers. The polymer shows high compatibility with gelatin and has no influence on the photog. properties, and the material shows good storage stability, high sensitivity, and high contrast.

IC ICM G03C001-04
ICS G03C001-34

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST contrast promoting agent polymer photog; **mercapto** terminate polymer photog; thiocarbamate terminate polymer photog; thiuram sulfide terminate polymer photog

IT Photographic films
(photog. film containing **gelatin**-compatible polymer as high contrast promoting agent)

IT **216964-78-2P 216964-98-6P 216965-00-3P**
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photog. film containing **gelatin**-compatible polymer as high contrast promoting agent)

IT 216964-83-9 216964-87-3 **216964-90-8** 216964-92-0
216964-95-3 216965-02-5 216983-92-5
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(photog. film containing **gelatin**-compatible polymer as high contrast promoting agent)

IT 86-93-1, 5-**Mercapto**-1-phenyltetrazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of polymer as high contrast-promoting agent)

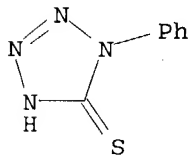
IT **216964-78-2P 216964-98-6P 216965-00-3P**
RL: MOA (Modifier or additive use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photog. film containing **gelatin**-compatible polymer as high contrast promoting agent)

RN 216964-78-2 CAPLUS

CN Phosphonium, [(1E)-2-(acetyloxy)-2-ethoxy-1-methylethenyl]triphenyl-, chloride, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S



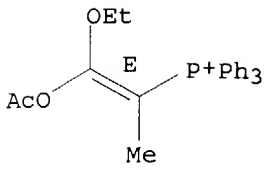
CM 2

CRN 216964-77-1
CMF (C25 H26 O3 P . Cl)x
CCI PMS

CM 3

CRN 119946-80-4
CMF C25 H26 O3 P . Cl

Double bond geometry as shown.

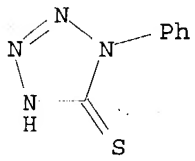


● Cl^-

RN 216964-98-6 CAPLUS
CN Acetic acid, [[3-(diethylamino)propyl]amino]oxo-, 2-[4-[(4-ethenylphenyl)amino]phenyl]hydrazide, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

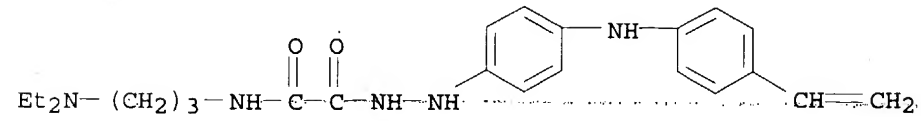


CM 2

CRN 216964-97-5
CMF (C23 H31 N5 O2)x
CCI PMS

CM 3

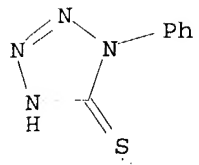
CRN 216964-96-4
CMF C23 H31 N5 O2



RN 216965-00-3 CAPLUS
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione and 4-ethenylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

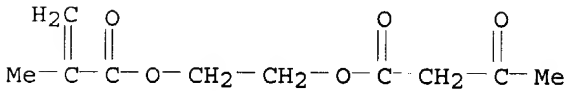


CM 2

CRN 216964-99-7
CMF (C10 H14 O5 . C8 H8 O3 S)x
CCI PMS

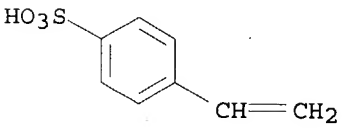
CM 3

CRN 21282-97-3
CMF C10 H14 O5



CM 4

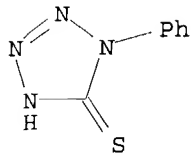
CRN 98-70-4
CMF C8 H8 O3 S



IT **216964-90-8 216964-95-3 216965-02-5**
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(photog. film containing **gelatin**-compatible polymer as high contrast promoting agent)
RN 216964-90-8 CAPLUS
CN Phosphonium, (7-oxo-8-nonenyl)triphenyl-, chloride, telomer with 1,2-dihydro-1-phenyl-5H-tetrazole-5-thione and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

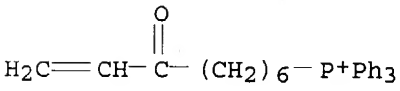


CM 2

CRN 216964-89-5
CMF (C27 H30 O P . C3 H5 N O . Cl)x
CCI PMS

CM 3

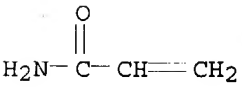
CRN 216964-88-4
CMF C27 H30 O P . Cl



● Cl^-

CM 4

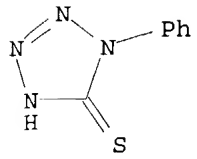
CRN 79-06-1
CMF C3 H5 N O



RN 216964-95-3 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl-, telomer with α-[2-(diethylamino)ethyl]-ω-[2-[(1-oxo-2-propenyl)amino]ethoxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 86-93-1
CMF C7 H6 N4 S

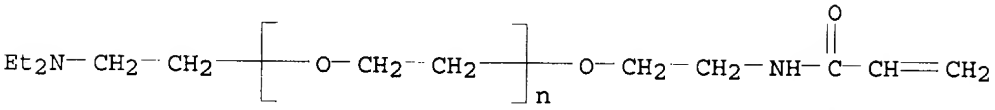


CM 2

CRN 216964-94-2
CMF ((C2 H4 O)n C11 H22 N2 O2)x
CCI PMS

CM 3

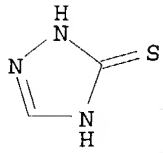
CRN 216964-93-1
CMF (C2 H4 O)n C11 H22 N2 O2
CCI PMS



RN 216965-02-5 CAPLUS
CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, telomer with 1,2-dihydro-3H-1,2,4-triazole-3-thione and 2-(dimethylamino)ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 3179-31-5
CMF C2 H3 N3 S

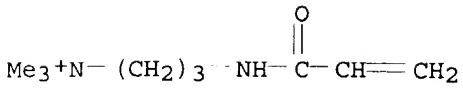


CM 2

CRN 216965-01-4
CMF (C9 H19 N2 O . C8 H15 N O2 . Cl)x
CCI PMS

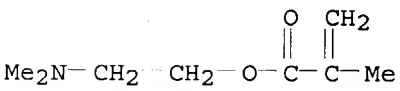
CM 3

CRN 45021-77-0
CMF C9 H19 N2 O . Cl



CM 4

CRN 2867-47-2
CMF C8 H15 N O2



L29 ANSWER 10 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:656161 CAPLUS
DOCUMENT NUMBER: 129:323838
TITLE: **Silver halide** photographic material and its processing method
INVENTOR(S): Miura, Osamu; Nagahama, Masaru
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10268472	A2	19981009	JP 1997-77441	19970328

PRIORITY APPLN. INFO.: JP 1997-77441 19970328

AB The material comprises a support having thereon ≥1 Ag halide emulsion layer and ≥1 light-insensitive hydrophilic colloid layer containing TiO2 and **N**-containing **heterocyclic** compound having ≥1 **mercapto** group (preferably **mercaptotetrazoles**) between the support and the emulsion layer, wherein the total gelatin content of the emulsion side layers is ≤5 g/m2. The material is processed by an automatic developing apparatus involving continuously developing and fixing processes within 60 s. The material shows improved resolving power without causing fog and silver stain and is suitable for rapid processing.

IC ICM G03C001-91
ICS G03C001-035; G03C001-047; G03C001-34; G03C005-26
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST **silver halide** photog material automatic development; fog inhibition photog development; **mercapto nitrogen** contg **heterocycle** photog material; **mercaptotetrazole** light insensitive layer photog material; titania intermediate layer photog

material
IT Photographic development
Photographic films
Photographic fog inhibitors
(rapid automatic development of **silver halide** material containing **mercaptotetrazole** and titania in intermediate layer for fog inhibition)
IT **Gelatins**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(rapid automatic development of **silver halide** material containing small amount of **gelatin** showing fog inhibition)
IT 86-93-1 15909-66-7 15909-94-1 23249-95-8 33898-72-5 38065-29-1 99131-26-7 105219-34-9 132029-26-6 132029-27-7
RL: MOA (Modifier or additive use); USES (Uses)
(fog inhibitor; rapid automatic development of **silver halide** material containing **mercaptotetrazole** and titania in intermediate layer for fog inhibition)
IT 13463-67-7, Titania, uses
RL: MOA (Modifier or additive use); USES (Uses)
(rapid automatic development of **silver halide** material containing **mercaptotetrazole** and titania in intermediate layer for fog inhibition)

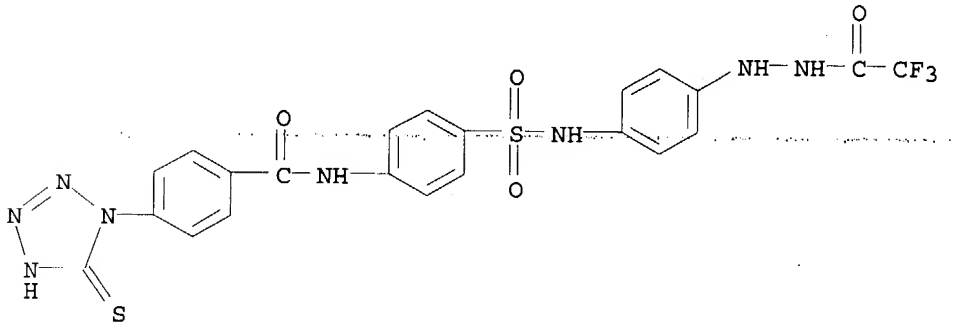
L29 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:335110 CAPLUS
DOCUMENT NUMBER: 129:73984
TITLE: Silver halide photographic material containing hydrazine and gelatin-interacting compound, its process and the image-forming method
INVENTOR(S): Muramatsu, Yasuhiko
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 73 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10133317	A2	19980522	JP 1996-292617	19961105

PRIORITY APPLN. INFO.: JP 1996-292617 19961105

AB Claimed photog. material having a Ag halide emulsion layer on a support contains a hydrazine derivative and an amine having a functional group or the precursor which reacts with the amino or carboxy group in the side chain of the gelatin mol. The amine or the precursor has the structure AmLnR1NR2R3 (I; A = functional group or the precursor stated above; R1 = alkylene, alkenylene, arylene; R2 and R3 = H, alkyl, alkenyl, aryl; L = linkage group; m = 0, 1; n = 1-4). Also claimed is the method for processing the material by an automatic processor using a reductone-containing developer solution of pH of 9.0-10.9 with the replenishing rate of 30-200 L/m2. Further claimed is the image-forming method comprising developing the photog. material with a solid processing chemical It provides an image with low fog, low black pepper d. and high contrast, even by the low pH developer solution It also has a good processing stability. Suitable compds. I are N-(vinylsulfo-ethyl)diethylamine, N-(vinylsulfo-ethoxyethyl)diethylamine, N-[1-ethyl-1-(4-ethyleneiminocarbonylaminophenoxy)]diethyl amine, n-[epoxymethoxy(triethoxy)ethyl]diethylamine, etc., and suitable reductone added to the developer as the developing agent is an ascorbic acid derivative

IC ICM G03C001-06
ICS G03C001-295; G03C005-26; G03C005-29; G03C005-30; G03C005-31
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 17700-22-0 **197900-28-0** 208936-75-8 208936-76-9 208936-77-0
208936-78-1 208936-79-2 208936-80-5 208936-81-6 208936-82-7
208936-83-8 208936-85-0 208936-86-1 208936-87-2 208936-88-3
208936-89-4 208936-90-7 208936-91-8 208936-92-9 208936-93-0
208936-94-1 208936-95-2 208936-96-3 208936-97-4 208936-98-5
208936-99-6
RL: DEV (Device component use); USES (Uses)
(photog. material containing hydrazine and **gelatin**-interacting amine compound for photomech. use)
IT **197900-28-0**
RL: DEV (Device component use); USES (Uses)
(photog. material containing hydrazine and **gelatin**-interacting amine compound for photomech. use)
RN 197900-28-0 CAPLUS
CN Acetic acid, trifluoro-, 2-[4-[[[4-[[4-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)benzoyl]amino]phenyl]sulfonyl]amino]phenyl]hydrazide (9CI) (CA INDEX NAME)



L29 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:454496 CAPLUS
DOCUMENT NUMBER: 127:154536
TITLE: Electronic structure of AgBr as revealed by ultraviolet photoelectron spectroscopy: effect of stabilizer, antifoggants and gelatin
AUTHOR(S): Inami, Yoshiyasu; Tani, Tadaaki
CORPORATE SOURCE: Ashigara Res. Lab., Fuji Photo Film Co., Ltd., Kanagawa, Japan
SOURCE: IS&T's Annual Conference, Final Program and Proceedings, 49th, Minneapolis, May 19-24, 1996 (1996), 1. IS&T--The Society for Imaging Science and Technology: Springfield, Va.
CODEN: 64RAAJ
DOCUMENT TYPE: Conference
LANGUAGE: English
AB UPS was used to determine the height of the top of the valence band of AgBr evaporated layers. The AbBr layers were coated with aqueous solns. or aqueous gelatin solns. of TAI photog. stabilizer (4-hydroxy-6-methyl-1,3,3a,7-tetraazaindene), PMT antifogging agent (1-phenyl-2-mercaptotetrazole), benzotriazole, Br-, and KSCN. The deposit of an aqueous gelatin solution of Br-

raised the top of the valence band of AgBr layer, but the deposit of aqueous solution of KBr had no effect on the height of the top of the valence band. The deposit of aqueous gelatin solns of TAI, PMT, benzotriazole, and KSCN lowered the top of the valence band of AgBr.

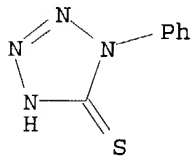
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **86-93-1** 95-14-7, 1H-Benzotriazole 333-20-0, Potassium thiocyanide 2503-56-2, 4-Hydroxy-6-methyl-1,3,3a,7-tetraazaindene 7785-23-1, Silver bromide 24959-67-9, Bromide, properties
RL: PRP (Properties)
(UPS study of effect of stabilizers and antifoggants and **gelatin** on electronic structure of AgBr)

IT **86-93-1**
RL: PRP (Properties)
(UPS study of effect of stabilizers and antifoggants and **gelatin** on electronic structure of AgBr)

RN 86-93-1 CAPLUS

CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:560782 CAPLUS

DOCUMENT NUMBER: 125:312254

TITLE: A comparative investigation of replication techniques used for the study of (S + Au)-sensitized AgBr microcrystals

AUTHOR(S): Buschmann, V.; Schryvers, D.; Van Landuyt, J.; Van Roost, C.; De Keyzer, R.

CORPORATE SOURCE: EMAT, RUCA, Univ. Antwerp, Antwerp, B-2020, Belg.

SOURCE: Journal of Imaging Science and Technology (1996), 40(3), 189-201
CODEN: JIMTE6; ISSN: 1062-3701

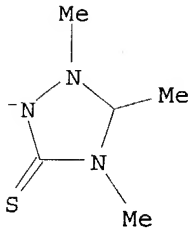
PUBLISHER: IS&T--The Society for Imaging Science and Technology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A full understanding of the chemical sensitization of silver halide microcrystals with nanoscale silver/gold-sulfide clusters requires knowledge of both their nature and distribution on the microcrystal surface. Because direct electron microscopy studies of sensitized silver halide microcrystals are almost impossible, due to the electron-induced release of photolytic silver, one must resort to reliable preparation techniques such as carbon replication or gelatin encapsulation. In the present study different replication techniques are investigated and compared. For cubic and octahedral silver bromide microcrystals, the carbon replica technique in combination with the complexing agent 1,2,4-triazolium thiolate is favored, because the traditional complexing agent, sodium thiosulfate, itself creates silver sulfide clusters as artifacts, which hampers the investigation of genuine silver-sulfur sensitization centers. Gelatin encapsulation, an alternative to carbon replication, shows severe reduction problems created during the hardening process of the gelatin. Tabular crystals, on the other hand, can be

replicated by the latter process without the need for hardening.
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 7772-98-7, Sodium thiosulfate **17370-06-8**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(complexing agent; carbon replication and **gelatin** encapsulation for electron microscopy of sulfide-gold-sensitized AgBr microcrystals)
IT **17370-06-8**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(complexing agent; carbon replication and **gelatin** encapsulation for electron microscopy of sulfide-gold-sensitized AgBr microcrystals)
RN 17370-06-8 CAPLUS
CN 1H-1,2,4-Triazolium, 4,5-dihydro-2,3,4-trimethyl-5-thioxo-, inner salt (9CI) (CA INDEX NAME)

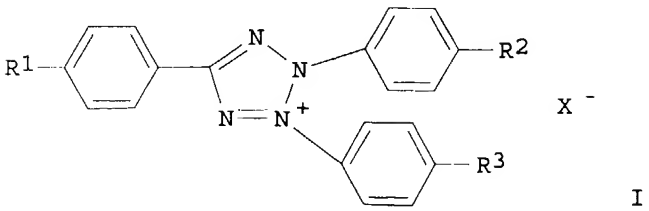


*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L29 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:547987 CAPLUS
DOCUMENT NUMBER: 125:181156
TITLE: **Silver halide** photographic material and its processing
INVENTOR(S): Wakasugi, Yasuhiro; Nakamura, Hiroshi
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08160562	A2	19960621	JP 1994-303634	19941207

PRIORITY APPLN. INFO.: JP 1994-303634 19941207
GI



I

AB The process comprises the steps of exposing an Ag halide photog. material, including ≥1 emulsion layer containing ≥90 mol% AgCl and ≥1 protective layer on a support, where the outermost layer of the emulsion layer side contains a <4 μm amorphous and a ≥4 μm (amorphous) matting agent, each for 4-80 mg/m2, and has a 25-200 mmHg surface-smoother value, developing, fixing, and washing using an automatic developing apparatus in replenishment rates of ≤200 mL/m2 for a developing solution and ≤300 mL/m2 for a fixing solution The material includes I (R1-3 = alkyl, amino, acylamino, hydroxy, alkoxy, acyloxy, halo, carbamoyl, acylthio, alkoxycarbonyl, carboxy, acyl, cyano, nitro, **mercapto**, sulfoxy, aminosulfoxy; X = halo, an (in)organic acid residue, or an anionic activating agent) and/or A-N(A1)N(A2)B [A = an aliphatic group, an aromatic group, a **heterocycle**; B = acyl, forming -**N**:C(R9)(R10) with A2 and N atoms; R9 = an alkyl, an aryl, a heterocycle; R10 = H, an alkyl, an aryl, a heterocycle; A1-2 = H, acyl, sulfonyl, oxalyl], in a hydrophilic-colloid layer in the emulsion layer-side and/or in the emulsion layer. The material shows good retaining ability of transparency and prevents mat-pin generation.

IC ICM G03C001-06
ICS G03C001-035; G03C001-32; G03C001-74; G03C001-76; G03C001-95; G03C005-26; G03C005-31; G03C005-395

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver halide** photog material processing; replenishment rate **silver halide** photog material; tetrazolium hydrazine photog **silver halide**

IT **Gelatins**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(hydrophilic-colloid layer; **silver halide** photog. material and its processing)

IT Photographic films
Photography
(**silver halide** photog. material and its processing)

IT 7631-86-9, Silica, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(amorphous, matting agent; **silver halide** photog. material and its processing)

IT 104497-77-0 180678-11-9
RL: TEM (Technical or engineered material use); USES (Uses)
(hardness-controlling agent; **silver halide** photog. material and its processing)

IT 9011-14-7, Poly(methyl methacrylate)
RL: TEM (Technical or engineered material use); USES (Uses)
(matting agent; **silver halide** photog. material and its processing)

L29 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:643372 CAPLUS
DOCUMENT NUMBER: 123:61967
TITLE: Enzyme-containing bath for recovery of silver from gelatin-containing printing plates
INVENTOR(S): Kitteridge, John Michael; Mallison, Malcolm James
PATENT ASSIGNEE(S): Du Pont (UK) Ltd., UK
SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 651063	A1	19950503	EP 1994-307892	19941027
EP 651063	B1	20000510		
R: DE, DK, ES, FR, GB, IT, NL, SE				
GB 2283335	A1	19950503	GB 1994-21668	19941027
GB 2283335	B2	19971119		
CA 2134585	AA	19950429	CA 1994-2134585	19941028
JP 07216466	A2	19950815	JP 1994-289084	19941028

PRIORITY APPLN. INFO.: GB 1993-22202 19931028

AB The Ag in photosensitive gelatin-based coatings on a substrate is recovered by washing in an aqueous bath or solution containing an enzyme for degradation of the gelatin layer, as well as a flocculating agent for the colloidal Ag particles. The treatment is suitable for removing the spent coating, and the flocculated Ag can be separated and recovered by filtration with bath recycling. The enzyme is typically bromelain, papain, or a bacterial protease added at 0.001-10 g/g of gelatin, and the flocculant can be a cationic polymer or CaCl2 used at 0.01-10 g/g Ag.

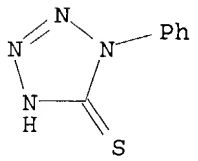
IC ICM C22B007-00
ICS C22B011-00

CC 54-2 (Extractive Metallurgy)
Section cross-reference(s): 74

IT **86-93-1** 139-08-2, Benzyldimethyltetradecylammonium chloride
10043-52-4, Calcium chloride, processes 26062-79-3, Merquat 100
28553-91-5, Methyldodecylxylylenebistrimethylammonium chloride
53754-72-6, Poly(1,1-dimethyl-3,5-dimethylenepiperidinium chloride)
164715-29-1, Glokill RP
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(flocculant; silver recovery from spent **gelatin**-containing printing plates by washing and flocculation)

IT **86-93-1**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(flocculant; silver recovery from spent **gelatin**-containing printing plates by washing and flocculation)

RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)

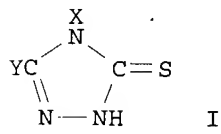


L29 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:198779 CAPLUS
DOCUMENT NUMBER: 122:92759
TITLE: Silver halide photographic materials
INVENTOR(S): Sekiguchi, Tadashi; Yoshida, Kazuhiro
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06230508	A2	19940819	JP 1993-14804	19930201

PRIORITY APPLN. INFO.: JP 1993-14804 19930201
OTHER SOURCE(S): MARPAT 122:92759
GI



I

AB In the material comprising ≥1 photosensitive Ag halide emulsion layer on a support, ≥1 of the hydrophilic colloidal layer (including the Ag halide emulsion layer) contains polymer latex stabilized with gelatin and I (X, Y = H, amino, alkyl, aralkyl, aryl, alkenyl, acylamino, sulfonamide). The material is suitable for rapid processing, prevents Ag sludge generation, and shows high sensitivity and storage stability.

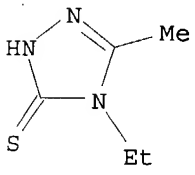
IC ICM G03C001-34
ICS G03C001-04

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

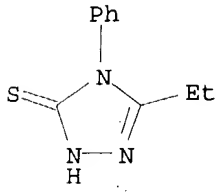
IT **6232-85-5 29448-76-8**
RL: MOA (Modifier or additive use); USES (Uses)
(silver halide photog. material containing triazole derivative and **gelatin**-stabilized polymer latex)

IT **6232-85-5 29448-76-8**
RL: MOA (Modifier or additive use); USES (Uses)
(silver halide photog. material containing triazole derivative and **gelatin**-stabilized polymer latex)

RN 6232-85-5 CAPLUS
CN 3H-1,2,4-Triazole-3-thione, 4-ethyl-2,4-dihydro-5-methyl- (9CI) (CA INDEX NAME)



RN 29448-76-8 CAPLUS
CN 3H-1,2,4-Triazole-3-thione, 5-ethyl-2,4-dihydro-4-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1994:90676 CAPLUS
DOCUMENT NUMBER: 120:90676
TITLE: Method of processing a silver halide radiographic element
INVENTOR(S): Bucci, Marco; Marchesano, Carlo; Ferrari, Dino; Illuminati, Carlo
PATENT ASSIGNEE(S): Minnesota Mining and Mfg. Co., USA
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

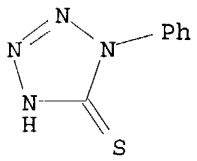
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 559061	A2	19930908	EP 1993-102834	19930224
EP 559061	A3	19950118		
EP 559061	B1	20020502		
R: DE, FR, GB, IT				
US 5318881	A	19940607	US 1993-20983	19930222
JP 06043601	A2	19940218	JP 1993-46537	19930308
JP 3247477	B2	20020115		

PRIORITY APPLN. INFO.: IT 1992-MI503 A 19920306

AB This invention relates to a method of processing an image-wise exposed silver halide photog. material by: (a) developing the photog. material for 5 to 15 s in an aqueous developing solution; (b) fixing the photog. material for 5 to 15 s in an aqueous fixing solution; and (c) washing the photog. material for 5 to 20 s; wherein both the developing and fixing solns. are free of gelatin hardeners. The method is particularly intended for use in processing radiog. films which comprise at least one silver halide emulsion layer containing tabular silver halide grains having an average diameter to thickness ratio of at least 3:1 and highly deionized gelatin, and showing a swelling index lower than 140% and a melting time of from 45 to 120 min. The method shows the advantages of lower environmental pollution and shorter processing times.

IC ICM G03C005-26
ICS G03C005-16
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 64-02-8, Tetrasodium EDTA 64-19-7, Acetic acid, uses **86-93-1** 92-43-3, Phenidone 107-21-1, 1,2-Ethanediol, uses 584-08-7, Potassium carbonate (K2CO3) 5401-94-5, 5-Nitroindazole 10043-35-3, Boric acid, uses 152742-53-5, Budex 5103
RL: USES (Uses)

(**gelatin** hardener-free photog. processing solution containing)
IT **86-93-1**
RL: USES (Uses)
(**gelatin** hardener-free photog. processing solution containing)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)

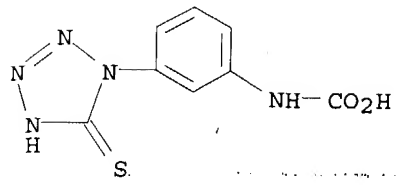


L29 ANSWER 18 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:49192 CAPLUS
DOCUMENT NUMBER: 118:49192
TITLE: Photographic fog inhibitors with reactable group with dispersion media
INVENTOR(S): Saito, Mitsuo; Okamura, Hisashi; Ikeda, Tadashi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04226449	A2	19920817	JP 1991-146503	19910523
US 5213959	A	19930525	US 1991-718180	19910620
US 5275931	A	19940104	US 1992-980734	19921124

PRIORITY APPLN. INFO.: JP 1990-161924 19900620
JP 1991-146503 19910523
US 1991-718180 19910620

AB In the Ag halide photog. materials essentially containing Ag halide particles, dispersion media, fog inhibitors containing reactive pendant groups which form covalent bond with the media, and hardening agents. The elution of the fog inhibitors to developer is prevented, the developer can be used repeatedly, and fog inhibitors in the developed photog. material works as antiseptics.
IC ICM G03C001-34
ICS G03C001-30
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 25
IT **145413-36-1D**, **gelatin** derivative 145413-37-2
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. fog inhibitor, reactable with dispersion media)
IT **145413-36-1D**, **gelatin** derivative
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. fog inhibitor, reactable with dispersion media)
RN 145413-36-1 CAPLUS
CN Carbamic acid, [3-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)phenyl]- (9CI) (CA INDEX NAME)



L29 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:523791 CAPLUS
DOCUMENT NUMBER: 115:123791
TITLE: Antifogging agent for silver halide photographic materials derived from modification of gelatin
INVENTOR(S): Hirabayashi, Shigeto; Kaguchi, Hiroyuki
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03037643	A2	19910219	JP 1989-171878	19890705

PRIORITY APPLN. INFO.: JP 1989-171878 19890705

AB The claimed antifogging agent is a modified gelatin containing an antifoggant moiety in its mol. structure. The photog. material with the antifoggant shows good sensitivity without fog, and good storage stability under high temperature and moisture. Thus, gelatin treated with 4-hydroxy-6-methyl-1,3,3a,7-tetrazaindene-2-carboxylic acid was added to Ag(Br,I) emulsion to give a photog. film.

IC ICM G03C001-34
ICS G03C001-047

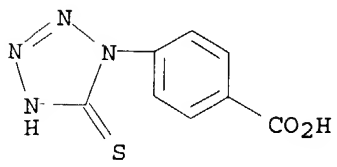
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 69-89-6 2349-67-9 **23249-95-8** 38065-06-4 40775-86-8 61346-19-8 135755-79-2 135755-80-5
RL: USES (Uses)
(**gelatin** modified with, for photog. fog inhibitor)

IT **23249-95-8**
RL: USES (Uses)
(**gelatin** modified with, for photog. fog inhibitor)

RN 23249-95-8 CAPLUS

CN Benzoic acid, 4-(2,5-dihydro-5-thioxo-1H-tetrazol-1-yl)- (9CI) (CA INDEX NAME)



L29 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1987:41541 CAPLUS
DOCUMENT NUMBER: 106:41541
TITLE: Image-receiving materials for silver complex diffusion-transfer process
INVENTOR(S): Okazaki, Atsuji; Tsubakii, Yasuo
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

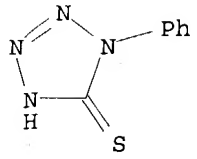
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61149956	A2	19860708	JP 1984-277242	19841225
JP 03012309	B4	19910219		
US 4643962	A	19870217	US 1985-789953	19851021

PRIORITY APPLN. INFO.:

JP 1984-225273	19841025
JP 1984-277242	19841225
JP 1985-49640	19850313
JP 1985-102404	19850513
JP 1985-102405	19850513
JP 1985-173753	19850806
JP 1985-178362	19850812
JP 1985-188214	19850826

AB The title image-receiving materials having an image-receiving layer containing a white pigment and phys. development nuclei on ≥1 side of a support have a gelatin-containing overlayer. The image-receiving materials can be sufficiently dyed by using a water-soluble anionic dye. Thus, a poly(ethylene terephthalate) film with a subbing layer was coated with a composition containing gelatin, a NiS colloidal solution, 1-phenyl-5-mercaptotetrazole, a gelatin hardener, a surfactant, TiO2, and a dispersing agent then overcoated with a composition containing lime-processed gelatin, a gelatin hardener, and a surfactant to give an image-receiving material. The material was lapped over an imagewise eposed photosensitive material, treated with a diffusion-transfer processing solution, removed from the photosensitive material, and then etching bleach-treated to give a white opaque image, which was dyed well by using an anionic dye as compared to a control without the overcoat layer.

IC ICM G03F007-06
ICS G03F007-00
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **86-93-1**, 1-Phenyl-5-mercaptotetrazole
RL: USES (Uses)
(image-receiving layer containing **gelatin** and white pigment and phys. development nuclei and, for diffusion-transfer photog. materials)
IT **86-93-1**, 1-Phenyl-5-mercaptotetrazole
RL: USES (Uses)
(image-receiving layer containing **gelatin** and white pigment and phys. development nuclei and, for diffusion-transfer photog. materials)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:414608 CAPLUS
DOCUMENT NUMBER: 103:14608
TITLE: Thermally developable, light-sensitive material
INVENTOR(S): Masukawa, Toyoaki; Koshizuka, Kunihiro
PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd. , Japan
SOURCE: Eur. Pat. Appl., 82 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 136142	A2	19850403	EP 1984-306324	19840914
EP 136142	A3	19861120		
EP 136142	B1	19900411		
R: DE, FR, GB				
JP 60061747	A2	19850409	JP 1983-169321	19830916
JP 01046053	B4	19891005		
US 4584267	A	19860422	US 1984-650815	19840913

PRIORITY APPLN. INFO.: JP 1983-169321 19830916

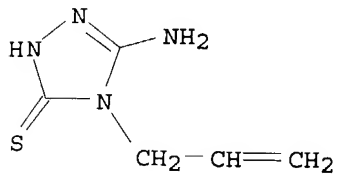
AB A photosensitive thermally developable material for diffusion transfer imaging contains a Ag halide, an organic Ag salt, a reducing agent and a binder containing gelatin and/or a gelatin derivative and poly(vinyl alc.) having a viscosity average polymerization degree ≤700. Thus, a solution containing 6% aqueous poly(vinyl alc.) 600, 6% aqueous gelatin 200 mL, benzotriazole Ag salt 22.6 g was ball milled for 48 h to give a Ag salt dispersion 1. To 150 mL of 8% aqueous poly(vinyl alc.) were added 1% MeOH solution of 3-amino-4-allyl-5-mercapto-1,2,4-triazole 14 mL, phthalazine 0.8, phthalic acid 1, tert-butylhydroquinone 2.1 g, 8% aqueous gelatin solution 50, dispersion 1 200 mL and a Ag(Br,I) emulsion (particle size 0.06 μm, AgI 4 mol. %, gelatin content 60 g/kg emulsion) 25 mL. The obtained solution was coated on a paper support to give a wet thickness of 55 μm, dried, overcoated with a protective film, imagewise exposed and heat-developed at 150° for 20 s. Poly(vinyl alc.) used in the preparation of the material had viscosity (for 4% solution) of 3 cps at 2°, saponification degree 88.2%, and polymerization degree 260. The material provided image with Dmax 1.58 and Dmin 0.12.

IC ICM G03C001-02
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 88-99-3, uses and miscellaneous 253-52-1 1948-33-0 22257-44-9 **76267-74-8** 81910-16-9 96879-64-0
RL: USES (Uses)
(photothermog. color diffusion-transfer material containing, binder for,

containing **gelatin** and poly(vinyl alc.) with low polymerization degree)

IT **76267-74-8**
RL: USES (Uses)
(photothermog. color diffusion-transfer material containing, binder for, containing **gelatin** and poly(vinyl alc.) with low polymerization degree)

RN 76267-74-8 CAPLUS
CN 3H-1,2,4-Triazole-3-thione, 5-amino-2,4-dihydro-4-(2-propenyl)- (9CI) (CA INDEX NAME)



L29 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:123036 CAPLUS
DOCUMENT NUMBER: 102:123036
TITLE: Image receptor material
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd. , Japan
SOURCE: Belg., 24 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

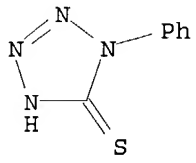
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 900528	A1	19850102	BE 1984-213613	19840907
JP 60057835	A2	19850403	JP 1983-166185	19830909
JP 63036651	B4	19880721		
JP 60136742	A2	19850720	JP 1983-247118	19831226
US 4605609	A	19860812	US 1984-643027	19840821

PRIORITY APPLN. INFO.: JP 1983-166185 19830909
JP 1983-247118 19831226

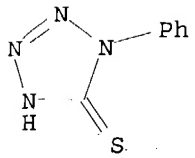
AB Gelatin containing ≤1000 ppm Ca (through treatment with lime) and having a gel concentration of ≥280 g (determined by PAGI procedure) is used in image receptor to achieve improved surface resistance (hardness) while maintaining good image optical d. Thus, a paper support coated with polyethylene and corona discharge-treated was overcoated with a composition (2 g/m2) containing gelatin (270 ppm Ca) 16 g, the reaction product of poly(vinyl alc.) and ethylene-maleic anhydride polymer 40 g, a 5 mmol/L solution of colloidal Ag sulfide 40, a 1% MeOH solution of 1-phenyl-5-mercaptotetrazole 10, 5% aqueous formalin 8, 5% aqueous Na lauryl sulfate 10, and H2O 250 mL, dried, conditioned at 70% relative humidity for 24 h, heated at 40° for 7 h, processed with an alkaline solution while in contact with an imagewise exposed diffusion-transfer photog. emulsion, and separated and washed with H2O to give an image of reflection d. 1.66 and transmission d. 3.86 vs. 1.57 and 3.48, resp., for a control using gelatin containing 4100 ppm Ca.

IC ICM G03C
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 50-00-0, uses and miscellaneous **86-93-1** 151-21-3, uses and

miscellaneous 2736-18-7 11113-75-0 25155-30-0
RL: USES (Uses)
(photog. image receptor material containing, calcium-containing **gelatin** for)
IT **86-93-1**
RL: USES (Uses)
(photog. image receptor material containing, calcium-containing **gelatin** for)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:70041 CAPLUS
DOCUMENT NUMBER: 102:70041
TITLE: Diffusion of processing components in emulsion layer versus depthwise development
AUTHOR(S): Shiao, D. D. F.
CORPORATE SOURCE: Res. Lab., Eastman Kodak Co., Rochester, NY, 14650, USA
SOURCE: Photographic Science and Engineering (1984), 28(6), 233-8
CODEN: PSENAC; ISSN: 0031-8760
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The diffusion of processing components into an emulsion layer was incorporated into the math. model of chemical development proposed by Shiao and Dedio (1981). To implement the model properly, diffusion coeffs. of certain processing components in gelatin were determined The model is in good agreement with exptl. results. Because of the intricate coupling between diffusion of relevant components and Ag development rate, the amount of Ag developed at a given time exhibits a significant spatial gradient (depthwise development) when the emulsion layer is incompletely developed. The model is used to probe questions concerning: (1) the effect of Ag and gelatin coverages on the rate of Ag development; (2) how to estimate diffusion-limited development time in a rapid processing mode; (3) local depletion of developing agent in the emulsion layer during development and how depletion is related to depthwise development.
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 51-78-5 **86-93-1** 92-43-3 123-31-9, uses and miscellaneous 136-85-6 150-75-4 2503-56-2 13047-13-7
RL: PRP (Properties)
(diffusion coefficient of, in **gelatin**, photog. development in relation to)
IT **86-93-1**
RL: PRP (Properties)
(diffusion coefficient of, in **gelatin**, photog. development in relation to)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



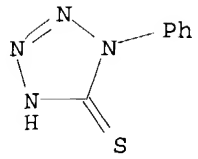
L29 ANSWER 24 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:36645 CAPLUS
DOCUMENT NUMBER: 102:36645
TITLE: Silver complex diffusion-transfer image receiving materials
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59166952	A2	19840920	JP 1983-41695	19830314
JP 63036650	B4	19880721		

PRIORITY APPLN. INFO.: JP 1983-41695 19830314

AB Title materials have an image receiving layer containing lime-processed gelatin with jelly strength ≥280 g (by PAGI method). The materials provide transferred Ag images with high d. Thus, a support was coated with a composition containing lime-processed gelatin (308 g jelly strength), Ni2S colloidal solution, 1-phenyl-5-mercaptotetrazole, 2,4-dichloro-6-hydroxy-s-triazine Na salt, and Na dodecylbenzenesulfonate, dried, humidity-controlled, and then heated at 40° for 7 days to give an image receiving material. The transferred images on the image receiving material showed high reflection d. (on a paper support) and high transmission d. (on polyethylene terephthalate support) compared to a control using low jelly strength gelatin.

IC G03C005-54
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **86-93-1** 2386-53-0 2736-18-7 12137-08-5 21548-73-2 25155-30-0 26338-57-8
RL: USES (Uses)
(diffusion-transfer photog. image receptor sheet with **gelatin** layer containing)
IT **86-93-1**
RL: USES (Uses)
(diffusion-transfer photog. image receptor sheet with **gelatin** layer containing)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 25 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:561176 CAPLUS
DOCUMENT NUMBER: 101:161176
TITLE: Low coating weight silver halide element
INVENTOR(S): Schadt, Frank L., III
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co. , USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

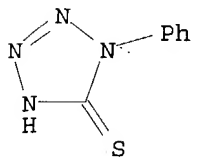
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4460679	A	19840717	US 1983-514174	19830715

PRIORITY APPLN. INFO.: US 1983-514174 19830715

AB A high speed photog. element providing high quality pos. or neg. images consists of (1) a support, (2) a layer containing a chemical bleachable, high strength tinctorial colorant and a hardener, (3) a timing layer, and (4) ≥1 photosensitive Ag halide layer. Thus, a poly(ethylene terephthalate) support subbed on both sides with a layer of vinylidene chloride-alkyl acrylate-itaconic acid copolymer mixed with alkyl acrylate polymer and coated on both sides with a thin anchoring substratum of gelatin was coated with a gelatin layer of blue colloidal Ag at 6.6 mg Ag/dm2 to provide a Ag covering power of .apprx.356, dipped in a hardener solution (3% aqueous glyoxal) for 1 min, air dried, coated with a timing layer of gelatin 13 mg/dm2, overcoated with a high-speed medical x-ray emulsion containing 98 mol % AgBr and 2 mol % AgI at 42 mg Ag halide/dm2, and then with a hardened gelatin protective layer. The element was imagewise exposed for 10-2 s on a Mark 7 sensitometer (FT-118 Xe flash tube) containing 1.0 neutral d. filter and a Number 207763, 10-2 compensating attenuator grid, developed in phenidone-hydroquinone developer for 90 s, fixed in a thiosulfate both for 90 s, washed in H2O 30 s, dried, bleached in a bath prepared by diluting a concentrate containing AcOH 10 mL, K alum 25, K borate 20, KBr 20, K ferricyanide 60 g, and H2O to 1 L 1:3 with H2O, fixed in thiosulfate for 90 s, and rinsed with H2O to give a Dmax of 2.6 ± 0.2.

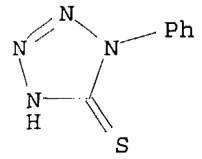
IC G03C005-24; G03C001-00; G03C001-76
NCL 430409000
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **15052-19-4**
RL: USES (Uses)
(photog. bleaching retardant, in low silver coating weight material with **gelatin** layer containing colloidal silver and hardener)
IT **15052-19-4**
RL: USES (Uses)
(photog. bleaching retardant, in low silver coating weight material with

gelatin layer containing colloidal silver and hardener)
RN 15052-19-4 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl-, sodium salt (8CI, 9CI) (CA INDEX NAME)



● Na

L29 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1982:77458 CAPLUS
DOCUMENT NUMBER: 96:77458
TITLE: Penetration of developer components in gelatinous and emulsion layers
AUTHOR(S): Red'ko, A. V.; Mitrofanov, V. V.
CORPORATE SOURCE: Leningr. Inst. Kinoinzh., Leningrad, USSR
SOURCE: Journal fuer Signalaufzeichnungsmaterialien (1981), 9(4), 255-68
CODEN: JSZMAE; ISSN: 0323-598X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The diffusion of developing solution components into gelatin and emulsion layers and the influence upon the time of penetration of such factors as layer thickness, its hardness, Ag halide concentration, the nature and structure of developing and antifogging agents as well as alkalies were studied. The mutual influence of the developer components upon their diffusion into the gelatin and emulsion layers is also discussed.
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT **86-93-1** 92-09-1 95-14-7 106-50-3, uses and miscellaneous 108-46-3, uses and miscellaneous 120-80-9, uses and miscellaneous 123-31-9, uses and miscellaneous 148-71-0 1310-58-3, uses and miscellaneous 1310-65-2 1310-73-2, uses and miscellaneous 3010-30-8 5117-07-7 23001-36-7
RL: USES (Uses)
(photog. emulsion and **gelatin** layers penetration by, diffusion rates for)
IT **86-93-1**
RL: USES (Uses)
(photog. emulsion and **gelatin** layers penetration by, diffusion rates for)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1977:592023 CAPLUS
DOCUMENT NUMBER: 87:192023
TITLE: Photographic elements containing encapsulated materials
AUTHOR(S): Maley, Stephen B.
CORPORATE SOURCE: UK
SOURCE: Research Disclosure (1977), 159, 35-6
CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE: Journal
LANGUAGE: English

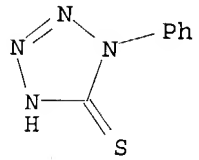
AB A process for incorporating highly reactive hydrophobic photog. additives into photog. gelatin emulsions by microencapsulation is described. The process is comprised of providing an oil solution in which there are dissolved hydrophobic photog. additives and ≥1 monomer which is polymerizable to a solid polymer insol. in the oil, dispersing the oil solution in a polar liquid (i.e. an aqueous gelatin solution) to form droplets, causing polymerization of the monomer, thereby forming an encapsulating wall around each droplet, and adding the dispersion to a Ag halide-gelatin emulsion. Thus, 1-phenyl-5-mercaptotetrazole (I) (photog. development restrainer) 0.1 g was dissolved in diethyllauramide 5 and EtOAc 10 mL, added to an aqueous gelatin solution (8.7%) (containing Na triisopropylnaphthalenesulfonate 0.4 g) 144 mL with stirring, passed through a colloid mill, chilled, and washed with H2O. The dispersion was added to a Ag(Br,I) emulsion at 23 mg I/mol Ag, coated on a support, exposed, developed in Kodak D-19 developer, fixed, washed, and dried to show a relative speed of 105, a γ value of 1.05, and a fog value of 0.10 vs. 53, 1.05, and 0.06, resp., for a control in which I was added directly as a MeOH solution

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT **86-93-1**
RL: USES (Uses)
(photog. development restrainer, incorporation of, in **gelatin** photog. emulsions by microencapsulation)

IT **86-93-1**
RL: USES (Uses)
(photog. development restrainer, incorporation of, in **gelatin** photog. emulsions by microencapsulation)

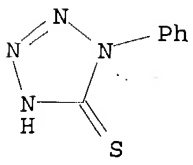
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



L29 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1967:407023 CAPLUS
DOCUMENT NUMBER: 67:7023
TITLE: Specific behavior of the gelatins in the presence of artificial restrainers of the physical ripening of photographic emulsions
AUTHOR(S): Katsev, Anton; Pyuskyulev, Georgi
SOURCE: Izvestiya na Nauchnoizsledovatelskiya Institut po Kinematografiya i Radio (1966), 6, 13-19
CODEN: INKRAA; ISSN: 0560-706X
DOCUMENT TYPE: Journal
LANGUAGE: Bulgarian

AB The retardation of the phys. ripening of ammonia-AgBr photographic emulsions caused by the addition of 1-phenyl-5-mercaptotetrazole (I) was investigated with 2 types of gelatins- Rousselot 6314 (inert) and Rousselot 8439 A (for photographic AgBr emulsions). It was established that the relative retardation of ripening depends on the type of gelatin. The average grain size of the emulsions with various addns. of I (0-3.8 + 10-4M) was plotted vs. phys. ripening time for both gelatins. The curves had a different character. Gelatin 6314 ripening rate-time curves tended to a constant value after approx. 60 min. even at low I concns. At higher I concns., this effect is attributed to the formation of a monomol. film on the grain surface. The retardation effect of I was more pronounced with gelatin 8439 A as compared to 6314 under identical conditions and concns. A stronger adsorption of this gelatin is suggested to cause the observed difference. Approx. calcns. of the areas occupied by the I ions and gelatin on the surface of the emulsion grains were made and the data are tabulated. It is assumed that ripening stops when a monomol. film of I and gelatin is formed on the surface of the grains. On the basis of the exptl. results, it is recommended to consider the type of gelatin used in the production of photographic paper or other materials prior to the addition of antifogging agents.

CC 74 (Radiation Chemistry, Photochemistry, and Photographic Processes)
IT **86-93-1**
RL: USES (Uses)
(photographic phys. ripening retardation by, and **gelatin** types in relation to)
IT **86-93-1**
RL: USES (Uses)
(photographic phys. ripening retardation by, and **gelatin** types in relation to)
RN 86-93-1 CAPLUS
CN 5H-Tetrazole-5-thione, 1,2-dihydro-1-phenyl- (9CI) (CA INDEX NAME)



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